

04-1360
(Serial No. 08/458,019)

SOLICITOR

AUG 16 2004

#46

U.S. PATENT & TRADEMARK OFFICE

In The
United States Court of Appeals
For The Federal Circuit

**IN RE ERIC A. JOHNSON,
HUEI-HSIUNG YANG, BERIL GELDIAY-TUNCER,
WILLIAM T. HALL, DAVID SCHREIBER, and KWOK HO
(Real Party in Interest Igene Biotechnology, Inc.)**

**APPEAL FROM THE UNITED STATES PATENT AND TRADEMARK OFFICE,
BOARD OF PATENT APPEALS AND INTERFERENCES.**

DISCLOSED 8/23/04
BRIEF OF APPELLANTS
DUE 9/10/04

Dean H. Nakamura
GRAY CARY WARE &
FREIDENRICH LLP
1625 Massachusetts Avenue, NW
Suite 300
Washington, DC 20036
(202) 238-7725

Date of Brief: August 12, 2004

Counsel for Appellants

THE LEX GROUP ♦ 1108 East Main Street ♦ Suite 1400 ♦ Richmond, VA 23219
(804) 644-4419 ♦ (800) 856-4419 ♦ Fax: (804) 644-3660 ♦ www.thelexgroup.com


TXLH

CERTIFICATE OF INTEREST

Counsel for appellant/real party in interest Igene Biotechnology Inc. certifies the following:

1. The name of the party represented by us is appellant/real party in interest Igene Biotechnology Inc.
2. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party represented by me are: N/A.
3. The names of all law firms and the partners or associates that appeared for the party now represented by me in the trial court or agency or are expected to appear in this court are: Sughrue, Mion, Zinn, Macpeak & Seas (no longer involved) and Gray Cary Ware & Freidenrich LLP, Dean H. Nakamura.

Dated: August 12, 2004



Dean H. Nakamura

TABLE OF CONTENTS

	Page
CERTIFICATE OF INTEREST	i
TABLE OF CONTENTS	ii
TABLE OF AUTHORITIES	iv
I. STATEMENT OF RELATED CASES	1
II. JURISDICTIONAL STATEMENT	1
III. STATEMENT OF THE ISSUE	1
IV. STATEMENT OF THE CASE	2
V. STATEMENT OF FACTS	2
A. The '019 Application	2
B. The '810 Patent	3
C. Separate Ownership of the '019 Application and the '810 Patent	3
VI. SUMMARY OF ARGUMENT	4
VII. ARGUMENT	4
A. Standard of Review	4
B. Obviousness-Type Double Patenting Does Not Apply Where There Is No Single Entity That Can Benefit from Unjustly Extended Patent Rights	5
C. Because the '019 Application and '810 Patent Have Different Owners, Different Inventive Entities, and Different Filing Dates, Obviousness-Type Double Patenting Is Inapplicable as a Matter of Law.	6

D.	Neither Law Nor Policy Supports the Board’s Expansion of the Obviousness-Type Double Patenting Doctrine to Situations Where Common Ownership Is Lacking.....	6
1.	The <i>Zickendraht</i> Case Does Not Support the Board’s Expansion of the Doctrine.....	6
2.	Other Concerns Related to Obviousness-Type Double Patenting Are Not Implicated Here.....	7
VIII.	CONCLUSION.....	8
ADDENDUM		
CERTIFICATE OF FILING AND SERVICE		

TABLE OF AUTHORITIES

Page(s)

CASES

<i>In re Berg</i> , 140 F.3d 1428 (Fed. Cir. 1998).....	4, 5, 6, 7
<i>In re Braithwaite</i> , 379 F.2d 594 (C.C.P.A. 1967)	5, 6
<i>Eli Lilly & Co. v. Barr Laboratories, Inc.</i> , 251 F.3d 955 (Fed. Cir. 2001).....	5, 6, 7
<i>In re Zickendraht</i> , 319 F.2d 225 (C.C.P.A. 1963)	6, 7

STATUTES

28 U.S.C. § 1295(a)(4)(A)	1
35 U.S.C. § 102(b/e)	2
35 U.S.C. § 112	2
35 U.S.C. § 134	1
35 U.S.C. § 141	1
35 U.S.C. § 142	1

REGULATION

37 C.F.R. § 1.304(a).....	1
---------------------------	---

OTHER AUTHORITY

3 Donald S. Chisum, Chisum on Patents, § 9.04[2][b][i] (2002 ed.)	7, 8
--	------

I. STATEMENT OF RELATED CASES

Counsel is aware of no case that may “directly affect or be directly affected by” the Court’s decision in this appeal. Fed. Cir. R. 47.5(b).

II. JURISDICTIONAL STATEMENT

The final decision of the Board of Patent Appeals and Interferences (the “Board”) was mailed on January 30, 2004, and docketed on February 2, 2004. Igene timely filed a notice of appeal on March 29, 2004. (Appendix at pp. 1121-1124); *see* 35 U.S.C. § 142 and 37 C.F.R. § 1.304(a) (allowing two months to appeal Board’s decision). The Court has jurisdiction over this appeal under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 141. The Board of Patent Appeals and Interferences had jurisdiction over this matter under 35 U.S.C. § 134.

III. STATEMENT OF THE ISSUE

Whether the judicially-created doctrine of obviousness-type double patenting applies when an application and a patent share a common inventor but have different inventive entities, have different filing dates and different owners and either document is an available reference to the other.

IV. STATEMENT OF THE CASE

The application at issue in this appeal is U.S. Ser. No. 08/458,019 (the "'019 application"). The Patent and Trademark Office ("PTO") finally rejected the remaining claims of the '019 application (the "'019 claims") under the first paragraph of 35 U.S.C. § 112 and under the judicially-created doctrine of obviousness-type double patenting over U.S. Pat. No. 5,356,810 (the "'810 patent"). (Appendix at pp. 143-145 and 175-189.)¹ The Board reversed the rejections under the first paragraph of 35 U.S.C. § 112. (Appendix at p. 31.) However, the Board affirmed the rejection based on obviousness-type double patenting. (Appendix at p. 31.) This appeal followed. (Appendix at pp. 1121-1124.)

V. STATEMENT OF FACTS

A. The '019 Application

The '019 application pertains to mutant yeast strains capable of producing enhanced levels of astaxanthin. (Appendix at pp. 367-403, 419-428.) The '019 application claims benefit to U.S. Ser. No. 07/229,536 (the "'536 application"), which was filed on August 8, 1988. (Appendix at pp. 883-919.) The '019 claims

¹ The 35 U.S.C. § 102 (b/e) rejection (Appendix at pp. 188-189) was withdrawn in the Examiner's Answer (Appendix at pp. 59-60 and 93).

on appeal (Appendix at pp. 135-136) find support in the disclosure of the '536 application. (Appendix at pp. 898, 901, 902, 913.) The subject matter of the '019 claims was presented on December 16, 1993. (Appendix at pp. 324-330.) Similar claims were presented on February 3, 1993, in U.S. Ser. No. 07/837,120, which is a continuation of the '536 application. (Appendix at pp. 779-787.)

The named co-inventors of the matter claimed in the '019 application are Eric A. Johnson, Huei-hsiung Yang, Beril Geldiay-Tuncer, William T. Hall, David Schreiber and Kwok Ho. (Appendix at pp. 404-415.) All inventor rights in the '019 application were assigned to Igene Biotechnology, Inc. ("Igene"), the real party in interest in this matter. (Appendix at pp. 1118-1120.)

B. The '810 Patent

The '810 patent can claim benefit to November 12, 1989 (Appendix at p. 665). The named co-inventors of the matter claimed in the '810 patent are Bent Fleno, Ib Christensen, Robert Larsen, Steffen R. Johansen, and Eric A. Johnson. (Appendix at pp. 665-684.) On its face, the '810 patent is assigned to Gist-Brocades N.V. (Appendix at p. 665.)

C. Separate Ownership of the '019 Application and the '810 Patent

As the Board acknowledged in its decision, the '019 application and the '810 patent have a common inventor but are not commonly owned. (Appendix at p. 24.) Igene, the owner of the '019 application, has no ownership interest in

Gist-Brocades N.V. or in the '810 patent. Conversely, neither Gist-Brocades N.V. nor any other entity associated with ownership of the '810 patent has any ownership interest in the '019 application or in Igene.

VI. SUMMARY OF ARGUMENT

The judicially-created doctrine of obviousness-type double patenting requires, among other things, that the application and patent at issue have the same owner. Here, the '019 application and the '810 patent have different inventive entities and different owners. Therefore, no single entity can benefit from unjust timewise extension of patent rights. Accordingly, the Board erred as a matter of law in affirming the PTO's rejection of the pending claims of the '019 application based on obviousness-type double patenting. The Board's decision should be reversed, the rejection withdrawn, and the '019 application remanded to the Examiner for further consideration on the merits.

VII. ARGUMENT

A. Standard of Review

The applicability of obviousness-type double patenting is a question of law that this Court reviews *de novo*. *In re Berg*, 140 F.3d 1428, 1432, 46 U.S.P.Q.2d 1226, 1229 (Fed. Cir. 1998).

B. Obviousness-Type Double Patenting Does Not Apply Where There Is No Single Entity That Can Benefit from Unjustly Extended Patent Rights.

Obviousness-type double patenting is a judicially-created doctrine that prevents extension of patent rights beyond the statutory time limit. *Berg*, 140 F.3d at 1431, 46 U.S.P.Q.2d at 1229. The doctrine “requires rejection of an application claim when the claimed subject matter is not patentably distinct from the subject matter claimed in a commonly owned patent.” *Id.* The purpose of the doctrine “is to prevent an unjustified extension of the term of the right to exclude granted by a patent by allowing a second patent claiming an obvious variant of the same invention to issue to the same owner later.” *Id.* at 1431-32, 46 U.S.P.Q.2d at 1229; accord *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 968, 58 U.S.P.Q.2d 1869, 1877-78 (Fed. Cir. 2001).

By its terms, the doctrine of obviousness-type double patenting does not apply where the application and patent at issue are not commonly owned. *See, e.g., Berg*, at 1431-32, 46 U.S.P.Q.2d at 1229; *Eli Lilly*, 251 F.3d at 968, 58 U.S.P.Q.2d at 1877-78; *In re Braithwaite*, 379 F.2d 594, 604, 154 U.S.P.Q. 29, 37-38 (C.C.P.A. 1967) (Smith, J., concurring) (noting that double patenting could not have occurred in the absence of a common assignee).

C. Because the '019 Application and '810 Patent Have Different Owners, Different Inventive Entities, and Different Filing Dates, Obviousness-Type Double Patenting Is Inapplicable as a Matter of Law.

As the Board acknowledged in its decision, the '019 application and the '810 patent are owned by different entities. (Appendix at p. 24); *see also* Section III.C, *supra*. Accordingly, as a matter of law, obviousness-type double patenting is inapplicable here. *See, e.g., Berg*, at 1431-32, 46 U.S.P.Q.2d at 1229; *Eli Lilly*, 251 F.3d at 968, 58 U.S.P.Q.2d at 1877-78; *Braithwaite*, 379 F.2d at 604, 154 U.S.P.Q. at 37-38 (C.C.P.A. 1967) (Smith, J., concurring). For the same reason, the doctrine's purpose "to prevent an unjustified extension of the term of the right to exclude . . . to the same owner" is not implicated. *Berg*, at 1431-1432, 46 U.S.P.Q.2d at 1229. Because the '019 application and the '810 patent have different owners, no single entity could benefit from unjustly extended patent rights.

D. Neither Law Nor Policy Supports the Board's Expansion of the Obviousness-Type Double Patenting Doctrine to Situations Where Common Ownership Is Lacking.

1. The *Zickendraht* Case Does Not Support the Board's Expansion of the Doctrine.

The Board acknowledged that there was no common ownership of the '019 application and the '810 patent, but nonetheless expanded the obviousness-type double patenting doctrine to a situation where there is different ownership. In doing so, the Board relied solely on a concurring opinion in *In re Zickendraht*, 319

F.2d 225, 232, 138 U.S.P.Q. 22, 27 (C.C.P.A. 1963) (Rich, J., concurring). The Board's reliance is misplaced for three reasons.

First, the concurring opinion is expressly limited to a common ownership situation. In the portion of the opinion quoted by the Board, Judge Rich stated that the public should be able to act on the assumption that "*the patentee's* protection is limited to what he claims" and that unclaimed matter will not be protected by later patents "issued *to the patentee.*" *Id.* (emphasis added).

Second, the facts of *Zickendraht* differ from the instant case in crucial respects. *Zickendraht* involved two applications filed on the same day by the same applicants. *Id.* at 229, 138 U.S.P.Q. at 25. Because *Zickendraht* itself involved a common ownership situation, it does not apply to the instant situation, where the application and the patent have different owners and different filing dates.

Third, even if it otherwise supported the Board's view, the concurring opinion in *Zickendraht* lacks precedential force. Accordingly, the limitation of the obviousness-type double patenting doctrine to common ownership situations in cases like *Berg* and *Eli Lilly* still would apply.

2. Other Concerns Related to Obviousness-Type Double Patenting Are Not Implicated Here.

Finally, this case does not implicate any ancillary concerns relating to obviousness-type double patenting. For example, there is no risk of harassment by multiple assignees. *See* 3 Donald S. Chisum, *Chisum on Patents*, § 9.04[2][b][i], at

9-94 (2002 ed.). As noted immediately above, because there is diversity of ownership, inventorship, and filing date between the '019 application and the '810 patent, there is statutory recourse for determining whether the subject matter of the '019 application is patentable and whether the '810 patent is enforceable.

There is also no risk of inconvenience to the PTO. *Id.* § 9.04[2][b][i]. The '019 application and the '810 patent are separate, distinct, and unrelated. Each inventive entity had the right to file its own patent application, and there is no issue of inconvenience that might arise from multiple filings by the same inventive entity.

Finally, because the '019 application and the '810 patent are independent of each other and are not commonly owned, there is also no risk that one entity might avoid file wrapper estoppel by filing a second application. *Id.* § 9.04[2][b][i].

VIII. CONCLUSION

Because there is no common ownership of the '019 application and the '810 patent, obviousness-type double patenting is inapplicable as a matter of law. Accordingly, the Board's decision should be reversed, the rejection withdrawn, and the '019 application remanded to the Examiner for further consideration on the merits.

August 12, 2004

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Dean H. Nakamura', with a long horizontal flourish extending to the right.

Dean H. Nakamura

GRAY CARY WARE & FREIDENRICH ^{LLP}

1625 Massachusetts Avenue NW, Suite 300

Washington, DC 20036-2247

Telephone: 202-238-7725

Fax: 202-238-7701

Attorneys for Appellant/Real Party in Interest

Igene Biotechnology, Inc

The opinion in support of the decision being entered today was not written
for publication and is not binding precedent of the Board.

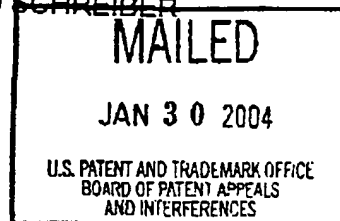
Paper No. 43

Sughrue Ref. A627401**UNITED STATES PATENT AND TRADEMARK OFFICE****BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES****DOCKETED**

FEB 2 2004

Ex parte ERIC A. JOHNSON, HUEI-HSIUNG YANG,
BERIL GELDIAY-TUNCER, WILLIAM T. HALL, DAVID SCHREIBER
and KWOK HO

Appeal No. 2002-1297
Application No. 08/458,019

ON BRIEF

Before WINTERS, SCHEINER and MILLS, Administrative Patent Judges.

SCHEINER, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of
claims 25-34, all the claims remaining in the application.

Claims 25, 29, 30 and 34 are representative of the subject matter on appeal and
read as follows:

25. An astaxanthin mutant *Phaffia rhodozyma* producing more astaxanthin than
naturally occurring *Phaffia rhodozyma*, said mutant producing more than 700
micrograms of astaxanthin per gram of dry yeast per six-day culture in YM medium,
wherein the amount of astaxanthin is determined by measuring the absorbance at 474
nanometers of a petroleum ether extract of *Phaffia rhodozyma* using a 1% (w/v)
extinction coefficient in a one centimeter cuvette of 2100.

3/30

Appeal No. 2002-1297
Application No. 08/458,019

Page 2

29. The mutant yeast of claim 28, wherein said mutant yeast produces more than 1700 μg of astaxanthin per gram of dry yeast.

30. The mutant yeast of claim 25, wherein said mutant yeast produces astaxanthin at a level at least two times that of naturally occurring *Phaffia rhodozyma*.

34. The mutant yeast of claim 33, wherein said mutant yeast produces astaxanthin at a level at least six times that of naturally occurring *Phaffia rhodozyma*.

The sole reference relied on by the examiner is:

Flenø et al. (Flenø)	5,356,810	Oct. 18, 1994
----------------------	-----------	---------------

Claims 25-34 stand rejected under the first paragraph of 35 U.S.C. § 112 "for lack of the requested required deposits commensurate in scope with the claimed inventions," "for the written description requirement," and "with respect to the [requirement for an] enabling description" (Answer, page 3). In addition, claims 25-34 stand rejected under the doctrine of obviousness-type double patenting as unpatentable over the sole claim of U.S. Patent No. 5,356,810 to Flenø.

On consideration of the record, we affirm the rejection of claims 25-34 on the grounds of obviousness-type double patenting, but reverse the rejections of the claims under the first paragraph of 35 U.S.C. § 112.

DISCUSSION

35 U.S.C. § 112, 1st ¶

The present claims are broadly drawn to mutant strains of *Phaffia rhodozyma* capable of producing various minimum levels of astaxanthin. On pages 13-27 of the Answer, the examiner sets forth three separate rejections under 35 U.S.C. § 112, first paragraph, one based on the requirement for an adequate written description, one based on the requirement for an enabling disclosure, and one based on the

requirement for the deposit of certain microorganisms in a recognized depository. Each of the rejections appears to be predicated on a recurrent theme or themes, so we will discuss them together.

According to the examiner, "[a]ppellants have already been granted claims as broad as the written disclosure based on the [] strains [deposited]" (Answer, page 18) in connection with "the claims allowed . . . in U.S. Patent Number 5,356,809" (*id.*, page 13). To the extent we understand the examiner's position, it is that the present generic claims are broader than those allowed in related U.S. Patent 5,536,809 (see, e.g., pages 13 and 15); that all of the mutant strains of Phaffia rhodozyma specifically described in the present specification (as well as the numerous strains described in the November 7, 1997 declaration of Dr. Stephen Hiu) were obtained by a selection protocol involving "(a) antibiotic, (b) cytochrome B inhibitor or (c) terpenoid synthetic pathway inhibitor" (see *id.*, pages 15, 18 and 22), but the claims would read on "strains prepared by another and materially different method" (see *id.*, pages 13 and 17); that "naming a type of material generally known to exist . . . is not a description of that material" (*id.*, page 22); and finally, that appellants are only enabled for mutants "obtained by the methods as described . . . without undue experimentation" (*id.*, pages 22-23) because of the "unpredictability pertaining to microorganisms [which] is supported by the U.S. Rules of Deposits which requires deposits of new microorganisms in Depositories" (*id.*, page 23).

We cannot agree with the examiner's position in any of these rejections. While there is a certain degree of unpredictability associated with both mutation and selection, the specification need only teach one skilled in the art to make and use the claimed

Appeal No. 2002-1297

Application No. 08/458,019

Page 4

invention without undue experimentation. "The fact that some experimentation is necessary does not preclude enablement; what is required is that the amount of experimentation 'must not be unduly extensive.'" PPG Indus., Inc. v. Guardian Indus. Corp., 75 F.3d 1558, 1564, 37 USPQ2d 1618, 1623 (Fed. Cir. 1996) (citations omitted).

The claims at issue are directed to Phaffia rhodozyma mutants producing various minimum levels of astaxanthin, and the examiner does not dispute that appellants have provided ample evidence that mutants meeting the limitations of the claims can be reliably obtained according to the protocol described in the specification. The examiner has not explained why appellants should be required to teach more than one protocol for obtaining the various mutants encompassed by the claims. The examiner's concern that the claims may read on mutants obtained by other methods would seem to be more relevant to an analysis of the claims with respect to prior art.

Nor is it clear what the examiner would have appellants deposit. The present claims are generic in nature; none is drawn to a particular strain. What would satisfy the examiner's requirement for deposit of "a reasonable number of species that would be commensurate in scope with the term 'mutant'?" Moreover, the examiner has not provided a fact-based explanation as to why it would be appropriate to require a deposit to enable or describe mutants meeting the requirements of the claims in the first place, inasmuch as it has not been established that the starting materials (cultures of naturally occurring Phaffia rhodozyma) would have been unavailable to the public. Finally, while we might agree with the examiner that "naming a type of material generally known to exist . . . is not a description of that material" (Answer, page 22), that is hardly the case here. Appellants have described numerous examples of Phaffia rhodozyma mutants with the required functional properties.

Appeal No. 2002-1297

Application No. 08/458,019

Page 5

Obviousness-Type Double Patenting

Claims 25-34 stand rejected under the doctrine of obviousness-type double patenting as unpatentable over claim 1 of Flenø. According to the record, the Flenø patent and the present application have a common inventor, but are not commonly owned. In deciding this issue, we have considered the arguments made in appellants' Brief and Reply Brief (paper nos. 39 and 41) and in the Examiner's Answer (paper no. 40). We have also considered the prosecution histories of the present application and parent application serial no. 08/067,797 (abandoned); as well as the prosecution history of U.S. Patent 5,536,810 to Flenø.

Claim 1 of Flenø is as follows:

1. An isolated pure culture of a strain of Phaffia rhodozyma which when grown under conditions comprising an oxygen transfer rate of at least 30 mmoles/l/hour on YM medium at 20°-22° C. for 5 days in 500 ml shake flasks with two baffles containing 50 ml of the medium and subjected to orbital shaking as 150 rpm, produces astaxanthin in an amount of at least 600 µg per g Phaffia rhodozyma dry matter, as determined by HPLC analysis, wherein said strain is Phaffia rhodozyma deposited under accession No. 224-87 CBS, accession No. 225-87 CBS, or accession No. 215-88 CBS, or a mutant thereof which retains the astaxanthin-producing capability.

Claim 25 of the present application, on the other hand, is broadly directed to any mutant Phaffia rhodozyma which produces more than 700 micrograms of astaxanthin per gram of dry yeast when grown on YM medium for six days.

Appellants argue that Flenø "was filed subsequent to the effective filing date of the present application, [but] issued first as a patent" "[b]ecause of [] delays faced by Appellants" (Brief, page 28). Accordingly, appellants submit that, at the very least, "a two-way obviousness analysis would be proper" (id.).

Appeal No. 2002-1297
Application No. 08/458,019

Page 6

In In re Berg, 140 F.3d 1428, 1432, 46 USPQ2d 1226, 1229 (Fed. Cir. 1998), the court discussed circumstances under which a two-way test of obviousness would be appropriate:

Generally, a "one-way" test has been applied to determine obviousness-type double patenting. Under that test, the examiner asks whether the application claims are obvious over the patent claims. In a recent case, with unusual circumstances, however, this court instead applied a "two-way" test. See Braat, [937 F.2d 589, 592, 19 USPQ2d 1289, 1291-92 (Fed. Cir.1991)]. Under the two-way test, the examiner also asks whether the patent claims are obvious over the application claims. If not, the application claims later may be allowed. Thus, when the two-way test applies, some claims may be allowed that would have been rejected under the one-way test. . . The essential concern was to prevent rejections for obviousness-type double patenting when the applicants filed first for a basic invention and later for an improvement, but through no fault of the applicants, the PTO decided the applications in reverse order of filing, rejecting the basic application although it would have been allowed if the applications had been decided in the order of their filing.
* * *

. . . Since Braat, many patent applicants facing an obviousness-type double patenting rejection under the one-way test have argued that they actually are entitled to the two-way test. The two-way test, however, is a narrow exception to the general rule of the one-way test. . . Nevertheless, the notion survives that in certain unusual circumstances, the applicant should receive the benefit of the two-way test. The question then is: when?

According to the court, id., 140 F.3d at 1435, 46 USPQ2d at 1232,

The two-way exception can only apply when the applicant could not avoid separate filings, and even then, only if the PTO controlled the rates of prosecution to cause the later filed species claims to issue before the claims for a genus in an earlier application.

Assuming, for the sake of argument, that the first prong of the test has been met (since the present application and the patent have different inventive entities), the issue becomes whether or not the second prong of the test has been satisfied; that is, whether or not the USPTO controlled the rate of prosecution to cause the patented claim to issue before the broader claims of the present application.

Appeal No. 2002-1297
Application No. 08/458,019

Page 7

In reviewing the prosecution histories of the relevant applications, we find the following: application serial no. 07/919,986, which was filed on July 27, 1992, and which matured into U.S. Patent no. 5,356,810 (Flenø), is a continuation of application serial no. 07/424,306, which was filed on November 12, 1989. A restriction requirement was mailed in the parent application thirteen months after it was filed (December 4, 1990), and the Flenø applicants responded with an election in approximately two months time (February 8, 1991). A non-final office action was mailed April 15, 1991; a three month extension of time was granted and the office action was responded to on October 18, 1991. A final office action was mailed January 27, 1992 and responded to in approximately two months (April 3, 1992). On August 27, 1992, the application was abandoned in favor of a file-wrapper-continuation (07/919,986). A non-final office action was mailed in the continuing application on May 3, 1993, and responded to within three months (July 27, 1993). A final rejection was mailed on October 18, 1993; a three month extension of time was granted and the office action was responded to on April 13, 1994. A notice of allowance was mailed on April 26, 1994, and the application issued as Patent no. 5,356,810 on October 18, 1994.

The prosecution history of the present application is as follows. The present application is a continuation of serial no. 08/067,797 (filed May 27, 1993), which is a continuation of serial no. 07/837,120, (filed February 14, 1992, now Patent no. 5,356,809), which is a divisional of serial no. 07/399,183 (filed August 23, 1989), now Patent no. 5,182,208), which is a continuation of serial no. 07/385,961 (filed July 28, 1989), which is a continuation-in-part of serial no. 07/229,536 (filed August 8, 1988).

On review of the record, it appears that claims similar to the claims presently on appeal first appeared on May 27, 1993, by way of a preliminary amendment filed in serial no. 08/067,797, the immediate parent of the present application. Thus, although the subject matter on appeal was disclosed at least as early as July 28, 1989, it was not claimed until Flenø's application 07/919,986 (which matured into Patent 5,356,810) was in mid-prosecution. A non-final action was mailed in appellants' application 08/067,797 on September 13, 1993, and appellants responded on December 16, 1993 (having been granted a one month extension of time). On April 7, 1994, the examiner suspended prosecution pending availability of a reference. On February 1, 1995, the examiner mailed a final rejection, citing Patent 5,356,810 to Flenø. On August 15, 1995, 08/067,797 was abandoned for purposes of filing a file wrapper continuation (FWC), i.e., the present application 08/458,019. During prosecution of 08/458,019, appellants were granted extensions of time on at least eight occasions; in addition the application was expressly abandoned on November 13, 1997, in order to reopen prosecution under 37 CFR § 1.129. Appellants' Brief on Appeal and Reply Brief were filed August 23, 2000 and March 28, 2001, respectively.

Inasmuch as the subject matter on appeal was disclosed at least as early as July 28, 1989, but was not claimed until Flenø's application 07/919,986 (which matured into Patent 5,356,810) was in mid-prosecution, we see no evidence that Flenø's claimed subject matter "issued first as a patent" "[b]ecause of the delays faced by Appellants"

(Brief, 28), the nine month suspension of prosecution notwithstanding. We conclude that the second prong of the test has not been satisfied, and a two-way obviousness analysis is not required in this instance.¹

Appellants argue that "even a one-way obviousness analysis fails" because "the amount of astaxanthin produc[ed by] the strains claimed by Flenø [(at least 600 µg per g Phaffia rhodozyma dry matter, when grown on YM medium for 5 days)] cannot properly be said to render the strains of the present claims, each reciting mutant strains producing at least 700 µg of astaxanthin [when grown on YM medium for 6 days], obvious" (Brief, page 28). We disagree. It cannot be denied that the properties of the Phaffia rhodozyma mutants encompassed by both the patented and present claims, at the very least, overlap. That is, present claim 25 encompasses any Phaffia rhodozyma mutant that produces at least 700 µg of astaxanthin when grown on YM medium for six days, while the patented claim encompasses a mutant of Phaffia rhodozyma strain CBS 224-87, 225-87 or 215-88 "which retains the astaxanthin-producing capability" of the parent strain. Merely by way of example, we note that Flenø's CBS 225-87 produced 706 µg of astaxanthin when grown in YM medium for five days (see column 25, line 66 through column 26, line 25). Indeed, the properties of the patented mutants reasonably appear to be the same as those required of the broadly claimed mutants.

¹ In addition, we note that rather than appeal the examiner's final rejection of January 23, 1995, appellants chose to refile the parent application of this case and continue prosecution for another five and a half years before filing the present appeal. Compare *In re Goodman*, 11 F.3d 1046, 1053, 29 USPQ2d 2010, 2016 (Fed. Cir. 1993) ("This court did not require a terminal disclaimer [in *Braat*] because Braat's application was held up not by the applicant, but by 'the rate of progress of the application through the PTO, over which the applicant does not have complete control' . . . This case requires no 'two-way' analysis . . . PTO actions did not dictate the rate of prosecution. Rather, appellant chose to file a continuation and seek early issuance of the narrow species claims. The appellant also chose to forego an immediate appeal to this court on its broader claims when it filed a continuation application").

Appeal No. 2002-1297
Application No. 08/458,019

Page 10

As appellants point out, "the determination for obviousness-type double patenting parallels the [analysis] for a 35 U.S.C. § 103 (a) rejection" (Brief, page 30). We would add that an analysis with respect to 35 U.S.C. § 102 is relevant as well (under the theory that anticipation is the ultimate of obviousness, see, e.g., In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982)). As explained in In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977):

Where . . . the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product Whether the rejection is based on 'inherency' under 35 U.S.C. § 102, on 'prima facie obviousness' under 35 U.S.C. § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's inability to manufacture products or to obtain and compare prior art products [footnote omitted].

As discussed above, we note a striking level of correspondence between the properties of the Phaffia rhodozyma claimed by Flenø and those of the presently claimed mutants, and hold that the examiner has set forth a reasonable basis for his assertion that the instant claims are but an obvious variation of the patented claim (Answer, page 38), appellants' arguments notwithstanding.

Appellants further argue that the "growth conditions specifically recited in Flenø claim one cannot be said to be taught or suggested by the present appealed claims" (id., page 29). This argument is not persuasive. First, the claims are directed to organisms capable of producing a certain amount of astaxanthin when grown under specified conditions, not to the methods of growing them. Moreover, as explained above, "[u]nder [the one-way] test, the examiner asks whether the application claims are obvious over the patent claims" (Berg, 140 F.3d at 1432, 46 USPQ2d at 1229 (Fed. Cir. 1998)), not the other way around.

Appeal No. 2002-1297
Application No. 08/458,019

Page 11

Finally, appellants argue that even though "a terminal disclaimer is not possible because the inventions are not commonly owned" (Brief, page 26), they "would not be recipients of an unjustified or improper timewise extension of the right to exclude," inasmuch as "a different owner [has already] been granted a right to exclude and . . . an ability to prevent issuance of a patent to the Appellants" (*id.*, page 29). Appellants argue that, "unless the rejection is reversed, they "would not obtain the fruits of their invention" (*id.*, page 30), an outcome "the public policy reasons behind the obviousness-type double patenting rejection would militate against" (*id.*, page 31). Nevertheless, whether two patentably indistinct inventions are owned by the same party, or two different parties,

[t]he rule [against double patenting] . . . operates in the public interest. When a patent issues . . . the public should be able, upon seeing the issued patent, to act on the assumption that the patentee's protection is limited to what he claims and that what is not claimed, in the way of obvious modifications, alternatives, and the like, will be free of protection through any later patents issued to the patentee. The public should also be able to act on the assumption that upon expiration of the patent it will be free to use not only the invention claimed in the patent but also any modifications or variants thereof which would have been obvious to those of ordinary skill in the art at the time the invention was made . . .

In re Zickendraht, 319 F.2d 225, 232, 138 USPQ 22, 27 (CCPA 1963) (Rich, J., concurring). We are not unmindful of appellants' dilemma, but the solution, if any, does not lie in disregarding the public policy reasons behind the doctrine of obviousness-type double patenting. Were we to do so, the public would be excluded from practicing the invention long after it should have passed into the public domain.

The rejection of the claims on the ground of obviousness-type double patenting is affirmed.

Page 12

For the reasons set forth in the body of this opinion, we have affirmed the rejection of claims 25-34 under the doctrine of obviousness-type double patenting, and reversed the rejections of claims 25-34 under the first paragraph of 35 U.S.C. § 112.

AFFIRMED

Demetra J. Mills
Demetra J. Mills
Administrative Patent Judge

)
)
)
)
)
)
) BOARD OF PATENT
)
) APPEALS AND
)
) INTERFERENCES

FROM SUGHRUE MION PLLC DC

(WED) 2.11.04 17:00/ST. 16:54/NO. 4260759132 P 16

Appeal No. 2002-1297

Page 13

Application No. 08/458,019

Sughrue, Mion, Zinn, MacPeak & Seas
2100 Pennsylvania Avenue N.W.
Washington, D.C. 20037

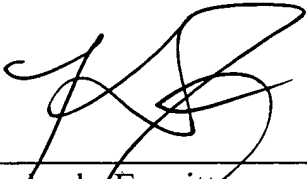
CERTIFICATE OF FILING AND SERVICE

I hereby certify that on this 12th day of August, 2004, two (2) bound copies of the foregoing Brief of Appellants were served, via U.S. Mail, postage prepaid, addressed to the following:

John M. Whealan
Linda M. Isacson
Heather Auyang
OFFICE OF THE SOLICITOR
Post Office Box 15667
Arlington, Virginia 22215

I also certify that on this 12th day of August, 2004, the required number of the Brief of Appellants were hand-filed at the Office of the Clerk, United States Court of Appeals for the Federal Circuit.

The necessary filing and service to Counsel were performed in accordance with the instructions given me by counsel in this case.



Kimberly Everitt
The Lex Group^{DC}, Inc.
One Massachusetts Ave., NW
Suite 670
Washington, DC 20001
(202) 789-2400